National Institute of Environmental Health Sciences

What is it with the weather and stroke?

Author(s): McArthur K, Dawson J, Walters M
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Abstract:

An influence of climate upon cerebrovascular risk is both biologically plausible and supported by epidemiological evidence. These relationships are important as they could yield public health strategies to help protect the vulnerable from the increased death rates arising during extreme cold and heat waves. Change in temperature impacts on many cerebrovascular risk factors, including serum lipid and fibrinogen concentration and blood pressure. The relationship between stroke and meteorological variables is complex because of the number of potentially relevant meteorological variables, differences in study design and climate between geographical areas and potential for confounding. Behavioral factors are also influenced by the weather, which may in turn affect stroke risk. Some studies suggest that lower temperature increases stroke risk and others suggest the converse, while changes in atmospheric pressure may link with increased intracranial hemorrhage risk. To date, data are confusing and conflicting and well-conducted prospective studies are required to help clarify these potentially important relationships.

Source: http://dx.doi.org/10.1586/ern.09.154

Resource Description

Communication:

resource focus on research or methods on how to communicate or frame issues on climate change; surveys of attitudes, knowledge, beliefs about climate change

A focus of content

Communication Audience:

audience to whom the resource is directed

Researcher

Exposure :

weather or climate related pathway by which climate change affects health

Air Pollution, Temperature

Air Pollution: Ozone, Particulate Matter

Temperature: Extreme Cold, Extreme Heat

Geographic Feature:

resource focuses on specific type of geography

None or Unspecified

Geographic Location:

resource focuses on specific location

Global or Unspecified

Health Impact:

specification of health effect or disease related to climate change exposure

Cardiovascular Effect

Cardiovascular Effect: Stroke

Population of Concern: A focus of content

Other Vulnerable Population: Socially isolated;Confined to bed;Pre-existing health problems

Resource Type:

format or standard characteristic of resource

Review

Timescale:

time period studied

Time Scale Unspecified